

Abstract of the Disclosure

Disclosed is a non-volatile semiconductor memory device including a circuit for controlling potentials of select lines and word lines in accordance with bit line setup, string select line setup, program and discharge periods of a program cycle. The control circuit

5 biases a string select line to a power supply voltage during the bit line setup period in the program cycle, and to a voltage between the power supply voltage and ground voltage during the string select line setup and the program periods. According to the string select line control scheme, program disturb due to a noise voltage induced at a string select line when a program voltage is applied to a word line adjacent to the string select line is prevented.

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100